NATURAL RESOURCES CONSERVATION SERVICE

DOCUMENTATION REQUIREMENTS

ROOF RUNOFF STRUCTURE (558)

FIELD DATA

The following is a list of the minimum field data to be collected:

1. System plan sketch of the building layout. Photos may be used to supplement the field data;
2. Dimensions of buildings, locations of proposed downspouts and outlets;
3. Profile along proposed centerline of underground outlets or dripline channel drains;
4. Soils investigation for dry well outlets to a depth of at least one foot below proposed bottom of the dry well, including soil textures, depth to water table, and depth to bedrock.

DESIGN DATA

The following is a list of the minimum required design data:

1. Peak runoff from each roof area for the required design storm;
2. Roof gutter size, slope, and capacity;
3. Downspout size, capacity, and maximum spacing;
4. For dripline channels: location, dimensions, slope, and capacity;
5. Quantities estimate;
6. Construction drawings shall include the following as a minimum:
   - Plan view showing buildings to receive roof runoff structure;
   - Gutter locations, gage, type, size slope, and direction of flow. Also include any special or required mounting instructions;
   - Downspout locations, type, and size;
   - Underground outlet type, including size or dimensions, location, and slope as applicable. A profile view is recommended for underground outlet tile and pipe. A detail should be included for dry wells to show dimensions and gravel fill requirements;
   - Details of trash, animal guards, or other appurtenances, as needed;
   - Critical area planting requirements (may be included in the specifications instead);
   - Quantities of materials;
   - Critical Inspection Items;
   - Utilities statement and Excavation Safety statement.
7. Construction specifications;
8. Written Operation and Maintenance (O&M) plan.

PRE-CONSTRUCTION & INSPECTION

1. Preconstruction Meeting With Landowner And Contractor. This is a meeting to explain the drawings and specifications, discuss requirements for construction and material certifications, level of staking needed, safety issues, utilities notification, and other topics. Document the following as a minimum:
   - Time and date of meeting;
   - Names of attendees;
   - Items discussed and decisions made.
2. Layout And Staking Of Practices. Document:
   - Survey notes showing layout of the practices, including date and who performed the staking;
   - If the contractor provides staking, then document any reviews made to ensure proper placement of the practice.
3. Utilities Notification. Can use form ENG-5 and ENG-6 to assist in tracking utility notifications (See NEM §MA503). Document:
   - Initial discussion with landowner about his or her responsibility to notify utilities;
   - Information from landowner about existence and location of known utilities;

- Assurances that utility company has been notified, including staking by utilities.

4. Inspection During Construction. Document:
   - All inspections made during construction, including all those identified on the drawings as critical inspection items;
   - Include visual inspections and conclusions, surveys, tests and test results;
   - Discussions with landowner and contractor;
   - Photographs taken before and during construction;
   - Approval by designer of any changes from the drawings or specifications before implementation of the change.

CONSTRUCTION CHECK

The following is a list of the minimum required data to support the as-built drawing:

1. Name of gutter manufacturer, product name, and material;
2. Actual location, type, length, sizes and dimensions of installed gutters and downspouts, or dripline channels;
3. Verification of the method of gutter mounting;
4. Gradation and quality of stone in dripline drains or dry well, as applicable;
5. Length, type and size of the outlet. Underground outlet pipes and dripline channels shall include survey check notes to show the installed slope and any key elevations as shown on the drawings;
6. Verification of installed trash and animal guards required on the drawings;
7. Disturbed areas are stabilized as required on the drawings or specifications;
8. Materials documentation to certify quality as stated on drawings and specifications.

CERTIFICATION

The following is a list of what must be certified by a person with the required approval authority for the installed practices:

1. Final quantities and documentation for quantity changes;
2. Statement on the as-built drawings that the installed practices meet or exceed the requirements of the NRCS practice standards;
3. Record in the case file the number of roof runoff structures installed. Normally, multiple structures would require separate outlets;
4. Report in PRMS, as applicable;
5. See documentation requirements of associated practices to determine certification requirements.